

1969-1970 Mustang Horns (and the oil cooler option)

M A R C U S A N G H E L

All 1969 and 1970 Mustangs, Boss's, Shelby's and Cougars used the same high and low pitch horns mounted to the radiator support. The horns were always installed in pairs and sounded together to produce a more perceptible sound rather than two horns of an identical frequency. The 69 and 70 style horn, including the mounting bracket assembly, was never actually serviced by Ford as such. Instead Ford sold a universal horn assembly kit that included an adjustable bracket and could be used on all the different models of cars. The assembly line correct style original horns are shown here below:



Low Pitch—Passenger side

High Pitch—Drivers side



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Low Pitch horn: Identified by the LO stamping on the side of the die cast housing and the edge of the bellmouth. Also has a single FoMoCo stamp on the edge of the housing. These horns have a longer coiled tube length to create a lower horn pitch.

High Pitch horn: Identified by the HI stamping on the side of the die cast housing and the edge of the bellmouth. Also has a single FoMoCo stamp on the edge of the housing. These horns have a shorter coiled tube length to create a higher horn pitch.

Taking it all apart to see how it works.....

Pictures here show what a horn looks like that is completely opened up. The pieces consist of three diecast sections, a steel diaphragm, electromagnet, contact points, gaskets, and rivets. When voltage is applied the electromagnet is activated which oscillates the diaphragm. This opens the contact points which de-energizes the electromagnet and relaxing the diaphragm. This happens hundreds of times a second which then blasts thru the megaphone housing creating the sound we hear.



Electromagnet and contact points



Click to enlarge



The steel diaphragm

Paint: All horns were originally dipped in paint (not sprayed) and although not easy to spot can be seen in some of the runs that originals have.



Date Codes: All horns during this time period have date codes that were either stamped into the housing near the edge of the bellmouth or on rare occasions were ink stamped just inside the bellmouth.



May 15, 1970



January 20, 1970



October 21, 1968



January 27, 1969

Mounting hardware: For standard horn installation (no oil cooler) the assembly manuals for 1969 and 1970 both show the bolt being installed from the back of the radiator support and the lock nut installed from the front. Although this is what is shown, this was not always what was done on the assembly line. It could have been installed either way. Notice that the bolts have serrated washers to help cut into the metal for better grounding of the horns.



Horn Spacer: Only used on cars with air conditioning this spacer would be used on the drivers side for clearance issues with the condenser.



Grounding and Paint: At some point in 1970 production Ford added an extra grounding point to the wire harness in the horn area. Additional pictures below also show some original paint cars where the radiator support area was lightly painted and then black paint brushed on after the horns were installed. This would help with grounding issues related to the horns.



Oil Cooler Option: The radiator support would be modified at the factory to allow the horn to be re-located on these cars to make room for the oil cooler (if so equipped). Available on certain Mustang, Cougar, and Shelby models with a 428, and during 1970 the Boss 302 that were equipped with the oil cooler, all 1969 Boss 302's and all Boss 429's.



Horn Reinforcement Bracket: This bracket should have been placed behind the radiator support to strengthen the area where the horns were being mounted, however not every car had them installed from the factory. Three different styles are shown below starting with the first generation bracket used in 1969. Then with changes in the radiator support and possible inference with the hood locks the bracket was modified in 1970 by cutting the edge. Ford assembly manuals confirm this change.



From Ed Meyers Collection



1970 radiator support to show clearance issues.



The three different versions shown side by side

Reproductions: Bill Upham from Mansfield Mustang makes an excellent reproduction of this bracket. 508 339 5409 or at <http://www.mansfieldmustang.com/>

Horn Jumper Wire: A special jumper wire was used to connect the two horns together from the same contact point of the main wiring harness. Two basic versions of this wire existed in which one was blue with a yellow stripe and the second was blue with the engineering number printed on the wire as C9DB-13A840-A. It is believed that a paper tag was only applied to the wire without the printing to identify it since the printed version already had the engineering number.



Photo from Jim Woods

Third possible version (yet to be confirmed) that is the yellow stripe wire with a sheathing added on the wire (Courtesy of Brian Conway).

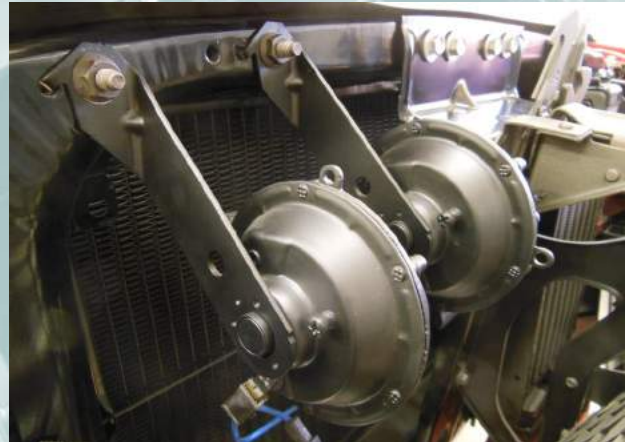
Mounting with oil cooler 69 vs 70: The mounting location of the horns was changed from 1969 to 1970 because of clearance issues. When moving the Hi pitch horn to the passenger side there is a tab that could rub against the hood as shown here causing damage to the hood and the horn. On some horns you can actually see this tab bent or worn down.



To overcome this clearance issue the position of the two horns was actually switched at some point into 1970 production. This eliminated the horn tab rubbing up against the hood. Interestingly, for the oil cooler option location only, the assembly manual shows the bolts being mounted from the front of the radiator support in 1969, and then shows them mounted from the rear in 1970. See photos here below.



1969 Installation—Click to enlarge



1970 Installation—Click to enlarge

Horn Restoration—For those who are interested in having their original horns restored you can contact Gary at the The Horn Works at 608 361 0095 or <http://www.carhornrestoration.com/>

Special thanks to Mike Bauman for additional photos.

ANGHEL RESTORATIONS

Marcus Anghel
Scottsdale Arizona

Phone: 602 628 2522

Website: www.anghelrestorations.com

E-mail: marcus@anghelrestorations.com